

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
Hideo ANDO et al. :
SERIAL NO. 10/076,325 : EXAMINER: Not Yet Assigned
FILED: February 19, 2002 : GROUP ART UNIT: 2615
FOR: INFORMATION STORAGE :
SYSTEM CAPABLE OF
RECORDING AND PLAYING
BACK A PLURALITY OF
STILL PICTURES

PETITION TO MAKE SPECIAL UNDER MPEP § 708.02(VIII)

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

I. Basis for the Petition

Pursuant to MPEP § 708.02(VIII) (8th ed. 2001), Applicants hereby petition for a special status for this Application.

II. Requirements for Granting Special Status

MPEP § 708.02(VIII) established five requirements for a grant of special status. The following subsections show that each of these five requirements is satisfied in the above-identified case.

A. Submit Petition and Fee: § 708.01(VIII)(A)

This petition is accompanied by the fee set forth in 37 C.F.R. § 1.17(h).

B. Agree to an Election Without Traverse: § 708.02(VIII)(B)

Applicants submit that Claims 16-19, presented by the Supplemental Preliminary Amendment filed herewith, are directed to a single, patentable invention. If a restriction requirement is imposed in this Application, Applicants agree to elect without traverse.

C. State that a Preexamination Search was Made: § 708.02(VIII)(C)

Searches were conducted by group art unit 2615 of the Patent and Trademark Office in cases related to the claimed subject matter of the present application (i.e., same patent family). These cases are:

Application Serial No. 09/476,777, filed on December 30, 1999
(now U.S. Patent 6,389,222 to Ando et al., hereinafter Ando '222).

Application Serial No. 09/348,267, filed on July 7, 1999
(now U.S. Patent 6,353,702 to Ando et al., hereinafter Ando '702); and

Application Serial No. 09/630,430, filed on August 1, 2000
(now U.S. Patent 6,360,056 to Ando et al., hereinafter Ando '056);

The search records indicate that searches in these related U.S. applications were conducted in the following classes/subclasses: 386/46, 95, 96, 105, 111, 112, 120, 121, 124, 125, 126 and 358/909.1 along with H04N 5/91. The references identified by the Patent and Trademark Office as relevant in these three cases are made of record in the Information Disclosure Statement filed herewith.

Applicants submit that the claimed subject matter of the present application is

substantially similar in scope to that of the parent Ando '056 and grandparent Ando '702 application, in that the grandparent Ando '702 application claims, in relevant part, a section of general information S_AVFI_GI for picture object management. At least one search pointer S_VOIGI_SRP#i which describes a start address of video object group information S_VOIGI. At least one video object information for picture object S_VOIGI#i. The at least one video object information for picture objects S_VOIGI#i includes a still picture VOB group general information S_VOIGI_GI containing information of a still picture VOB group, and a still picture VOB entry S_VOB_ENT# which contains information of how to access objects including pictures. The at least one video object information for picture objects S_VOIGI#i including information of an address of a first still picture S_VOIGA_SA and a size of a picture.

Likewise, the Parent application Ando '506 claims, in relevant part, at least one still picture cell information comprising still picture cell general information. The still picture general cell information comprises a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information comprising an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group.

The present application claims in relevant part, a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video

object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file.

Further, Applicants conducted supplemental search of the PATOLIS (Patent Online Information System) for Applicants' related Japanese applications to identify other prior art that may not have been found in the above-identified searches. Results of these supplemental searches are identified in Applicants' petitions for accelerated examination submitted to the Japanese Patent Office for the above-listed related Japanese applications. Translated copies of these Japanese petitions are filed herewith. The search methodology used for the supplemental search entailed the use of the following keywords play list/user-defined PGC, entry point, primary text, item text, movie AV file information, still picture video object group, time map information, VOB entry, management information, moving and still. The field of search included all Japanese Patent and Utility models from January 1990 to March 26, 2002.

Together, these U.S. searches qualify as a pre-examination search for the present application as the search methodology entailed searching by keyword and patent class in accordance with the subject matter of the disclosure.

D. Submit a Copy of the Most Relevant References: § 708.02(VIII)(D)

The reference cited in the Applicants supplemental search (Japanese patent Application No. 5-165935) is included in an Information Disclosure Statement attached hereto which includes references cited in the Grandparent and Parent cases. Translated copies of the Japanese patent publications 11-136613, 9-182013, 8-205014, and 5-158778 are also filed via the attached IDS. A translated copy of Japanese patent publications 7-143429 is

being produced and will be filed via a supplemental IDS forthwith. English and Japanese copies of the Japanese petitions for accelerated examination, including summaries of prior art found, are also filed via the attached IDS. Further, the Information Disclosure Statement of February 19, 2002, includes the balance of references cited by the Patent and Trademark Office in the Grandparent and Parent cases relevant to the claimed subject matter. All references now of record, including the references attached hereto are discussed below with reference to the claimed subject matter of claims 16-19.

E. Submit a Detailed Discussion of the References, Pointing Out How the Claimed Subject Matter is Patentable Over the References: § 708.02(VIII)(E)

Consistent with the searches discussed above, Applicants respectfully submit that the claims of the parent application patentably distinguish over all of the references now of record. A detailed discussion pursuant to 37 C.F.R. § 1.111 is provided below, pointing out how the claimed subject matter is patentable over the references of record.

Applicants' claim 16 recites, *inter alia*, an information storage medium including:

“ . . . said at least one still picture cell information comprises still picture cell general information,
said still picture cell general information comprises a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group,
said still picture cell general information comprises an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group,
said still picture video object group information comprises a still picture video object group general information, and
said still picture video object group general information comprises a start address of a corresponding still picture video object group in the still picture audio/video file.”

By way of background, optical discs employ a DVD (Digital Versatile Disc) standard for storing audio and video data as MPEG-2 encoded data structures. In video cameras, still pictures are stored as independent files.¹ Storage of still pictures presents compatibility and continuity problems with the DVD standard. For example, still images cannot be grouped by similarity of contents or temporal relation. Thus, such files are not easily processed by a recording/playback apparatus employing the standard as each file must be accessed on an individual basis to examine the contents.

Japanese Patent Application KOKAI Publication No. 5-165935² (hereinafter JP '935), describes still image files recorded in an IC memory card where associated image management data or "image relativity data" (i.e., date) is grouped and classified and then recorded in a large scale memory (26)³. The image management data of JP '935 is generic in nature and does not include data useful for the precise management of still images such as address and pointer information.

JP '935 does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture

¹ Application at pages 1-2.

² IDS filed concurrently herewith.

³ JP '935 at page 19, paragraph 30; Fig. 4.

audio / video file as recited in Claim 16.

Japanese Patent Application KOKAI Publication No. 11-136613⁴ (hereinafter JP '613), describes an image recording device capable of quickly retrieving undesired recording data while recording a moving image on a recording medium capable of being accessed at random. Specifically, an INDEX portion of an image file includes indicia for indicating deletion permissions.⁵ In this way, image files designated for deletion are not displayed to an LCD monitor during a search in the photographic mode of the device.

JP '613 does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

Japanese Patent Application KOKAI Publication No. 9-182013 (hereinafter JP '013) describes a flash memory (8) of a camera device for storing still image files. A deletion protection flag is included in header data with respect to each image file⁶. In this way, by manipulation of the header data, an operator can enable deletion protection of an image file.

⁴ IDS filed concurrently herewith.

⁵ JP '613 Fig. 3; Fig. 5.

⁶ JP '013 at page 88 paragraph 23 to page 90 paragraph 29; Fig. 5.

JP '013 does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

Japanese Patent Application KOKAI Publication No. 8-205014⁷ (hereinafter JP '014) is the parent application of JP '013 described above and describes substantially the same flash memory of a camera device for storing still images.

JP '014 does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

Japanese Patent Application KOKAI Publication No. 5-158778⁸ (hereinafter JP '778), describes an information storage device for storing image information in a

⁷ IDS filed concurrently herewith.

⁸ IDS filed concurrently herewith.

recording medium where erase operations are controlled by the presence or absence of an erase-permission flag for each page. In use, the system receives data via a scanner (21), the user sets the erase-permission via a keyboard (24) prior to scanning the data or as the scanned data appears on a display (22) for appropriate storage in a disk drive (23).

JP '778 does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

Japanese Patent Application KOKAI publication No. 7-143429⁹ (hereinafter JP '429), describes dividing an image information recording area into a plurality of segments to store moving images or still images and gaining an access to the recording area from an image recording unit by designating a specific segment.

JP '429 does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video

⁹ IDS of February 19, 2002.

object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

U.S. Patent No. 6,148,138¹⁰, (Sawabe et al., hereinafter Sawabe) corresponding to Japanese Patent Application KOKAI publication No. 09-2522450, discloses recording information divided to VOB units corresponding to each predetermined reproduction time interval and signal processing of MPEG2 is carried out. Each VOB unit stores navi-pack data containing time information and retrieval information.¹¹ The time information of this navi-pack indicates a reproduction time when the VOB unit is to be reproduced on the reproduction time axis. The retrieval information of this navi-pack is used for retrieving the recording position of the VOB unit to be reproduced on the DVD in which information is recorded. Although this navi-pack does not handle text information, the sub-picture data in the VOB is capable of recording characters, graphics and the like as sub-picture.

Sawabe does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

¹⁰ IDS filed concurrently herewith.

¹¹ Sawabe at Column 9, lines 27-64.

U.S. Patent No. 5,712,947,¹² (Oguro et al., hereinafter Oguro), discloses a method of recording identification signals on a tape recording medium for retrieving static video frames during a quick search operation from among static and dynamic video frames stored in recording portions on the tape recording medium. A quick search operation can be conducted more quickly than a normal mode search in accordance with Oguro and includes the steps of recording for a first predetermined time a first identification signal (PPID) identifying a plurality of the static and dynamic video frames in the recording portions which include a static video frame.¹³ The first predetermined time is sufficient to allow detection of the first identification signal during the quick search operation. Selecting a desired static video frame from among the static and dynamic video frames recorded in a respective recording portion of the recording portions. Implanting, for a second predetermined time shorter than a sufficient time to allow detection during the quick search operation, into the respective recording portion subsequent to the recording of the recording portions, a second identification signal (INDEX ID) identifying the desired static video frame. Retrieving the desired static video frame by detecting the first identification signal (PP ID) corresponding to the respective recording portion during the quick search operation, detecting thereafter the second identification signal (INDEX ID) corresponding to the desired static video frame, and reproducing the desired static video frame identified by the second identification signal.

Oguro does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still

¹² IDS filed concurrently herewith.

¹³ Oguro at column 10, lines 17-59.

picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

U.S. Patent No. 5,678,160¹⁴ (Aotake et al., hereinafter Aotake), discloses an information recording medium such as a CD-ROM or CD-I configured to store a plurality of items including at least one of video information and audio information and playback control information for controlling the reproduction of the items recorded thereon. Along these lines, playback control information (PSD) is comprised of a plurality lists and wherein at least one of the lists (PL) includes an item information (#n) indicating at least one item reproduced in accordance with the lists and a pointer representing an offset from a leading end of the playback control information indicating a separate list linked to the lists in accordance with a list ID offset table LOT. Similarly, a recording medium is disclosed having data recorded thereon, wherein the reproduction of the content of the recording medium is controlled in accordance with the plurality of lists. The recorded data includes a plurality of items of audio and video data. A first playback list (PL) includes item information which indicates an address of an item of audio and video data, includes a list pointer which indicates an address of a list, a second playback list including item information which indicates an address of an item of audio and video data, a list pointer which indicates an address of a list, and a selection list (SL) including an item information which indicates an address of an item of audio and video data. The selection list includes a first playback list pointer which indicates an address of the first playback list, and a second playback list pointer which indicates an address of the second playback list.

¹⁴ IDS of February 19, 2002.

Aotake does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

U.S. Patent No. 5,731,852¹⁵ to Lee, as shown in Fig. 1, an image/audio information recording and reproducing apparatus is disclosed, including a semiconductor memory (16). A signal processor (12) is provided for processing image and audio information so that the image and audio information can be recorded on and reproduced from the semiconductor memory. A system controller (17) operably linked between the semiconductor memory and the signal processor, manages the storage of individual image information and individual audio information corresponding to the individual image information in the semiconductor memory as well as to read the stored image and audio information from the semiconductor memory using a start address of the individual information and both a start address and an end address of the individual audio information.¹⁶

Lee does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a

¹⁵ IDS of February 19, 2002.

¹⁶ Lee at column 3 line 4 to column 4 line 4; Fig. 2C.

still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

U.S. Patent No. 6,067,400¹⁷ (Saeki et al., hereinafter Saeki), discloses a data structure of a multimedia disc for storing at least one object that has sub-picture data (i.e., menu image) and moving picture data. The data structure employs private packets (1) and (2) of an MPEG packetized elementary stream (PES)¹⁸. The private packets in accordance with the MPEG format provide a plurality of small storage areas, each of which includes a first sub-area and a second sub-area, with the object in the data area being stored over consecutive small areas. The first sub-area stores moving picture data having a certain time period and sub-picture data being reproduced at the same timing as the moving picture data (DSI packet). The sub-picture data is a menu image which includes a plurality of buttons for showing menu items for selecting a VOB corresponding to desired interactive content. The second sub-area stores control information including button control data for responding to a user's operation applied onto a menu image reproduced in the first sub-area in the same small area and auxiliary control data for substituting the user's operation applied onto the menu (PCI packet).

Saeki does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still

¹⁷ IDS of February 19, 2002.

¹⁸ Saeki at column 11 line 66 to column 13 line 12.

picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

U.S. Patent No. 6,185,365¹⁹ (Murase et al., hereinafter Murase), discloses an optical disc such as a DVD having a data region for storing a plurality of video sequences composed from a plurality of video segments, and a management information region for storing a plurality of sequence information. The sequence information (program chain multi-branch) indicates a reproduction order of video segments included in each video sequence and positions on the optical disc of the video segments included in each video sequence. Sequence-link information indicates which one of two or more video sequences follows each video sequence depending on a value of a reproduction apparatus's register (R). At least one of the video segments includes control command information (a11) which enables the value of the reproduction apparatus's register to be updated²⁰. The control command information includes a register information indicating one of the reproduction apparatus registers, an immediate value information indicating a predetermined value, condition information indicating a comparison expression of a value indicated by the immediate value information to a value of the register indicated by the register information, and link information (branch commands) indicating video sequences to be reproduced when a comparison expression indicated by the current condition information is true.

Murase does not disclose or suggest a still picture cell information including still picture cell general information, the general information including a start still picture

¹⁹ IDS of February 19, 2002.

²⁰ Murase at column 22, lines 27- 57.

video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture cell general information includes an end still picture video object entry number referring to a specified number of still picture video objects included in a still picture video object group. The still picture video object group information includes a still picture video object group general information including a start address of a corresponding still picture video object group in the still picture audio / video file as recited in Claim 16.

The claimed subject matter of claim 16 recites a recording format and DVD compatible data structure for facilitating the management and search of still pictures stored in accordance with the DVD standard. Management information including map information pertaining to groups of still images is stored for identifying the images by recording address and the like²¹. In this way, stored still images can be accessed to continually display a plurality of such images upon playback. Applicants submit that none of the references now of record, either alone or in combination, disclose or suggest this feature of the claimed invention.

Claim 17 recites substantially the same limitations discussed above, albeit in method claim format. Claim 18 recites substantially the same limitations as discussed above albeit in the context of a reproducing apparatus, and method claim 19 being the apparatus form of claim 18. Therefore, Applicants respectfully submit that the limitations defined by claims 16-19 patentably distinguish over the references of record.

²¹ Application at page 24 line 22 to page 25 line 5.

III. Conclusion

The petition to make special meets all the requirements of M.P.E.P. § 708.02(VIII), and therefore, should be granted. Accordingly, Applicants respectfully request that this Application be advanced out of turn for examination, and the assigned Examiner, pursuant to the suggestions of M.P.E.P. § 708.02(VIII), contact the undersigned to schedule an interview for advancing the prosecution of this case.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'James J. Kulbaski'.

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